

ABSTRACT

[0063] The invention relates to a detector for detecting electrically neutral particles. The detector has a housing (10) filled with a counting gas. A converter (22) in the housing (10) generates conversion products as a result of the absorption of the neutral particles. The conversion products generate electrically charged particles in the counting gas, and a readout device (19) detects the electrically charged particles. A device (18) generates an electrical drift field for the electrically charged particles in a region of the volume of the counting gas so that at least some of the electrically charged particles drift toward the readout device (19). The converter device (22) is of charge-transparent design and being arranged in the detector housing (10) so that the drift field passes through at least part of this device.